

ABSTRACT

A process and device for obtaining fatty acids or fatty acid esters from native oils and fats by their enzymatic hydrolysis and optional simultaneous esterification with alcohols, especially n- and iso-alcohols, is disclosed. Biocatalysts for hydrolysis of oils or fats, are caused to act on a mixture of an oil or fat, water, and optionally an oil- or fat-soluble alcohol to hydrolyze or alcoholize the oil or fat. The reaction mixture thus formed is placed in an self-discharging centrifuge for separation into a glycerol-containing aqueous phase and an organic phase, the centrifuge is adjusted so that a lipase-enriched intermediate phase collects in the centrifuge between the aqueous that is drained off and the organic phase that is drained off, and the centrifuge is emptied at specified times and the discharged drum contents from the centrifuge are returned to the combined hydrolysis or optionally combined alcoholysis process.